

*The illustrations in this report show some of Aluminium Limited's international operations and are the work of the Canadian industrial photographer, George Hunter. On the front cover, the run-out table of one of the large aluminum rolling mills of Alcan Industries Limited, at Rogerstone, South Wales. Back cover: The Alcan identification is a feature of the landscape at "Alcan" Aluminio Iberico works in southern Spain.*

## **Report for the year ending December 31st 1964**

*On pourra se procurer le texte français de ce rapport annuel en s'adressant au secrétariat de la Compagnie, case postale 6090, Montréal 3, Québec, Canada.*

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FIELD-MARSHAL THE RT. HON. THE EARL ALEXANDER OF TUNIS, K.G.	NATHANAEL V. DAVIS	President
DANA T. BARTHOLOMEW	DANA T. BARTHOLOMEW	Vice President, Chief Financial and Planning Officer
FRASER W. BRUCE	FRASER W. BRUCE	Vice President
DR. DONALD K. DAVID	PAUL LAROQUE	Vice President, Secretary and Legal Officer
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M. B. de SOUSA PERNES	K. C. BALA	Assistant Secretary
JOHN L. SULLIVAN	W. B. FINDLAY	Assistant Secretary
M. P. WEIGEL	P. D. WILSON	Assistant Treasurer

	Year Ending 31st December	
	1964	1963
<b>RESULTS</b>		
Sales and operating revenues . . . . .	\$ 727.5 million	\$ 669.8 million
Income before income taxes . . . . .	\$ 103.1 million	\$ 68.8 million
Depreciation and reserve for future income taxes . . . . .	\$ 67.3 million	\$ 64.7 million
Net income . . . . .	\$ 49.8 million	\$ 32.7 million
Aluminium Limited preferred dividends . . . . .	\$ 2.6 million	\$ 1.3 million
Common shares outstanding . . . . .	31,050,817	31,024,054
Profit per common share (after preferred dividends) . . . . .	\$ 1.52	\$ 1.01
Common dividends per share . . . . .	\$ (U.S.) 0.65	\$ (U.S.) 0.60
Book value per common share . . . . .	\$ 16.59	\$ 15.76
<b>BALANCE SHEET ITEMS</b>		
Net current assets . . . . .	\$ 297.2 million	\$ 297.5 million
Lands, plants and facilities (gross) . . . . .	\$1,715.0 million	\$1,659.0 million
Additions to fixed capital . . . . .	\$ 65.2 million	\$ 67.5 million
Common shareholders' equity . . . . .	\$ 515.0 million	\$ 488.8 million
<b>OTHER</b>		
Sales of aluminum products (short tons) . . . . .	862,546	861,554
Number of employees . . . . .	54,541	53,737
<b>SHAREHOLDERS</b>		
Number of common shareholders according to share register (year-end) . . . . .	49,600	51,100
Residents of Canada . . . . .	22,400	20,300
Residents of U.S.A. . . . .	25,300	28,900
Residents of other countries . . . . .	1,900	1,900
Percentage of common shares held (year-end)		
By residents of Canada . . . . .	28.8%	24.2%
By residents of U.S.A. . . . .	67.7%	72.2%
By residents of other countries . . . . .	3.5%	3.6%



After several years of depressed earnings, it is encouraging to report that the Company in 1964 experienced a year of improved profits principally as a result of obtaining a higher realized price on its sales of primary aluminum. NET INCOME of Aluminium Limited consolidated after all charges, including dividends on preferred shares of subsidiaries, was \$49.8 million in 1964 as compared with \$32.7 million for the year 1963. The 1964 profit total was the second largest in the Company's history.

EARNINGS for the common shares (after allowing for dividends on the Company's preferred shares) were \$1.52 per share on the 31,050,817 outstanding shares as compared with \$1.01 per share on the 31,024,054 shares outstanding at the end of 1963.

CONSOLIDATED SALES of aluminum at 862,500 tons were again at a record high but only slightly larger than the 861,600 tons sold in 1963.

SALES AND OPERATING REVENUES were \$727.5 million compared with \$669.8 million in 1963. After deducting "cost of sales and operating expenses" there remained \$254 million of gross profit before depreciation, compared with \$218 million in 1963.

INCOME TAX provision on earnings of the consolidated companies was \$48.1 million. The Company's "current" income taxes, at \$46.6 million, apart from the reserve for future income taxes, are substantially above any preceding year.

CASH GENERATION, consisting mainly of net income and depreciation, was \$117.1 million or \$3.77 per share compared with \$97.4 million or \$3.14 per share in 1963.

COMMON DIVIDEND payments were at the previous quarterly rate of U.S. 15 cents per share for the first three quarters of 1964 but in the fourth quarter were increased to the

1956 level of U.S. 20 cents per share. Total common dividend disbursements, expressed in Canadian dollars, were \$21.8 million compared with \$20.0 million in 1963.

PLANT AND INVESTMENT outlays were \$70 million during 1964, excluding the important acquisitions in the United States which were neither finalized nor paid for until January, 1965.

Generally good economic conditions, combined with further increases in the consumption of aluminum in most of the free world markets, provided the favourable elements affecting the Company's activities during the past year. We estimate that total consumption of aluminum in all forms in the free world increased by 14 percent over 1963 to a total of approximately 6,650,000 tons. 1964 was, therefore, the third consecutive year of higher than long-term average growth in consumption, following an 11 percent increase in 1963 and a 12 percent increase in 1962.

Western world aluminum usage has in fact grown without interruption since 1959, recording an average growth of 9 percent a year from the 1956 peak to 1964, or somewhat more than the growth in capacity.

Productive capacity in the primary end of the industry increased less in 1964 than consumption, resulting in a better balance between supply and demand and a most welcome reduction in the large excess capacity which has overshadowed the industry for the past six years. In this connection, your attention is drawn to Chart I.

Against this background, published prices of primary aluminum increased in most markets. During the fifteen months ending in December, there were three successive increases in world prices for primary aluminum, resulting in a total increase in published ingot prices of 2 cents a pound over this period. These increases have largely offset

the fall in prices which had occurred in the preceding years since 1959. The latest half-cent increase in the ingot price in November had little impact on the Company's earnings in 1964. 5

Since the summer of 1963, the Company has followed a selective sales policy to obtain higher realizations on its sales. In the highly competitive market which has continued to prevail, this policy has inevitably resulted in some reduction in the Company's relative market position. As noted above, in terms of volume the Company's sales in 1964 were virtually at the same level as in 1963, whereas during 1964 aluminum consumption as a whole increased by an estimated 14 percent. Profits, however, have materially benefitted from the increased realization on sales.

Total aluminum produced by the companies associated with Aluminium Limited, (including the production of non-consolidated companies) and ingot received in exchange for alumina, reached 1,000,000 tons in 1964. For those who are interested in statistical milestones, we believe this is the first time a western producer group has reached the million-ton level. Semi-fabricated tonnage in the entire group of associated companies also grew and in 1964 reached the 590,000-ton level, as shown on Chart II.

In 1964, the Company's total inventories were rebuilt to meet possible swings in the business (Chart III). Aluminium Company of Canada, Ltd. during the year increased its production to 740,400 tons of primary aluminum, compared with 625,600 tons in 1963, and by year-end was producing at 94 percent of capacity. In January of 1965, the operating rate was reduced to 89 percent by a shutdown of some 35,000 tons of older facilities in Quebec. The company plans to modernize these facilities to provide improved working conditions and efficiencies for the future.

6 The company's smelter capacity at Kitimat, B.C., was increased in 1964 with the completion of 20,000 tons of previously partially-built facilities. An additional 20,000 tons of new capacity at Kitimat will be ready in 1965. Indeed, Alcan in Canada could be ready on fairly short notice to meet a sustained level of demand 25 percent, or 170,000 tons, above last year's level. As illustrated on Chart IV, substantial additional smelting capacity could be brought in by 1970 using power and other resources now idle or diverted to other markets.

Looking just at the consolidated companies, tonnage sales of ingot and ingot products have increased 15 percent since 1959 while sales of fabricated products have increased 72 percent. These statistics (and Chart V) emphasize the importance of the Company's fabricating expansion program which has been carried on during the past several years. In terms of weight, consolidated sales of fabricated products were 354,600 tons in 1964, compared with 330,700 tons in 1963 and 205,900 tons in 1959.

The Company's bauxite mines and alumina plants in Jamaica, India and Brazil, and the bauxite mines in Malaysia and France, continued satisfactory operations in 1964. In British Guiana, the impact of serious political and racial disturbances, and unusually heavy rains, retarded the production of bauxite but better mining rates have since been obtained reflecting generally improved operating conditions. In Australia, satisfactory progress is being made by our partners in Queensland Alumina Limited towards the completion of a 672,000-ton per annum alumina plant at Gladstone, in 1967, in which the Company has a 20 percent interest.

During 1964 and in January, 1965 the Company made major new fabricating investments in the United Kingdom

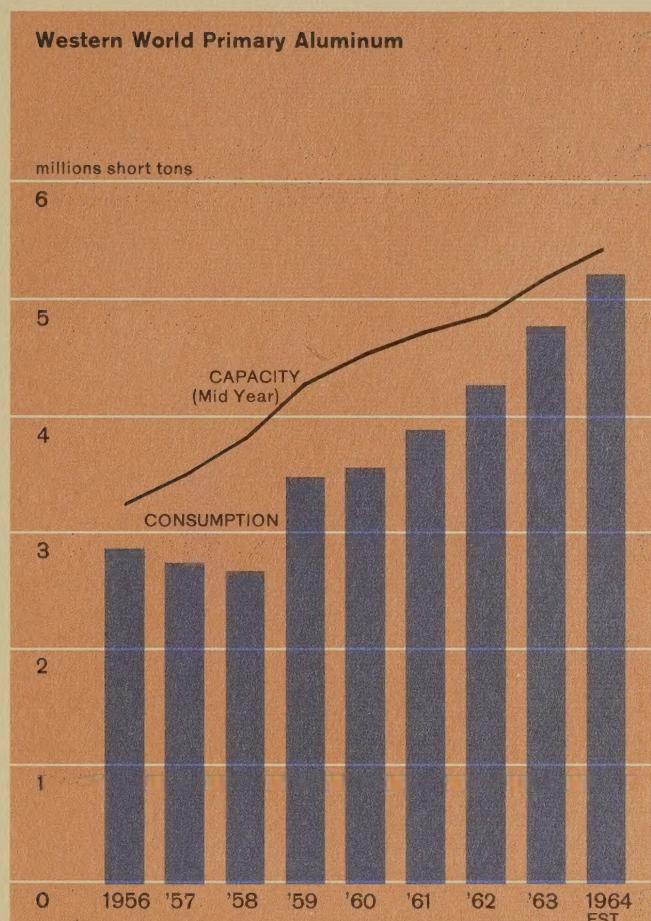
and the United States. The expansion of our fabricating interests in other countries is reported in the Review of the Year.

In the United Kingdom, Alcan Industries Limited acquired Fisher's Foils Limited, one of the principal aluminum foil-rollers in that country and a user for many years of Alcan foil stock. This foil business represents a new investment in 1964 of \$17 million.

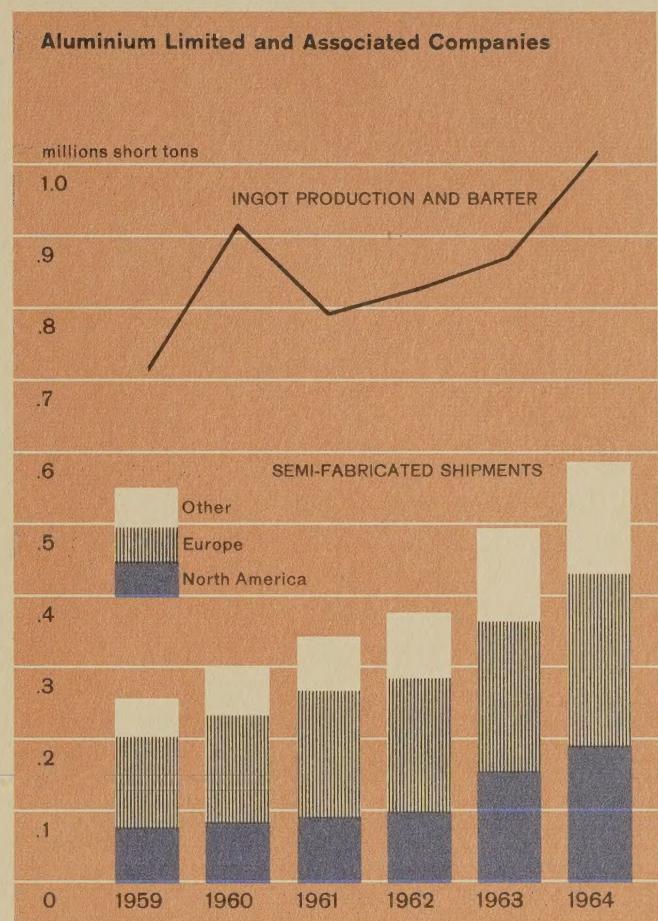
In the United States on January 5th, 1965, the Company purchased full ownership of Alroll, Inc. and Alplate, Inc. and at the same time acquired the aluminum fabricating facilities of two of its three former partners in Alroll. Alroll was formed in October 1960 primarily to provide an efficient source of reroll material for Alroll's U.S. fabricating partners who processed the reroll material into sheet products in a variety of forms. While the Alroll project succeeded in its original aim of providing low-cost reroll for further processing, the prices realized by our U.S. partners for sheet products derived from this reroll declined to a point where they suffered serious losses. In these circumstances the Company felt that the only reasonable solution was to acquire the aluminum fabricating facilities of the Bridgeport Brass division of National Distillers and Chemical Corporation and the aluminum fabricating facilities of Cerro Corporation. As a consequence, Aluminium Limited has for the first time entered the sheet rolling business in the United States. At the same time the Company entered into a long-term contract to supply reroll to its third former partner, Scovill Manufacturing Company.

A new company, Alcan Aluminum Corporation, has been formed to own and operate the newly-acquired facilities. Eric A. Trigg, Treasurer and Planning Officer of Alu-

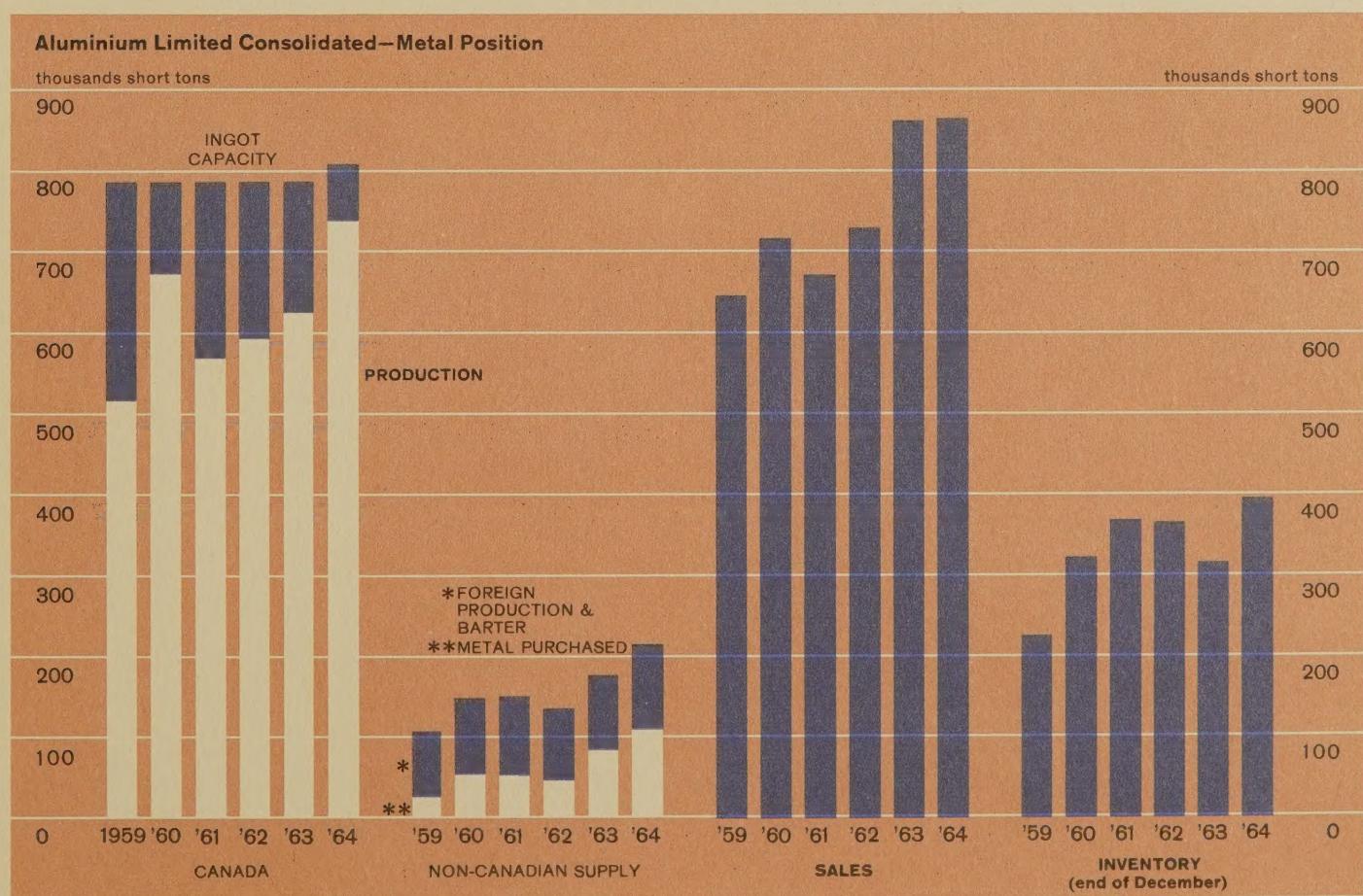
I



II



III



8 minium Limited, gave up these posts to assume the presidency of this new company. Other experienced personnel from Aluminium Limited have been transferred to reinforce the operating managements of the previously separate organizations and consolidate their efforts. A more detailed description of these transactions and of the facilities will be found in the Review of the Year.

While the Company's earnings still provide less than a satisfactory return on the invested capital, they have improved materially over 1963. In 1964 higher ingot realization contributed most to the higher profit level, reflecting increased prices and a selective sales policy. Lower ingot costs resulting from more complete use of facilities also helped, along with increased sales of chemical products, while overhead costs including interest were reduced somewhat.

In relation to 1959, there has been a sharp recovery in earnings despite the higher financial costs involved in expanded plant and working capital, as well as increased overhead expenditures related to an expanded business and a larger research effort.

It is also perhaps pertinent to add that the Company's reported income includes only the dividends from non-consolidated companies, which tends to underestimate earnings slightly. In 1964 the Company's share in the earnings of non-consolidated companies 50 percent or more owned was \$3.8 million, or \$1.7 million greater than the \$2.1 million of actual dividends received.

In 1964, cash generation exceeded the outlay for new plant and investment (\$70 million) and dividends, making possible a substantial reduction in debt, including short term borrowings (\$36 million), for the first time in many years (Chart VII).

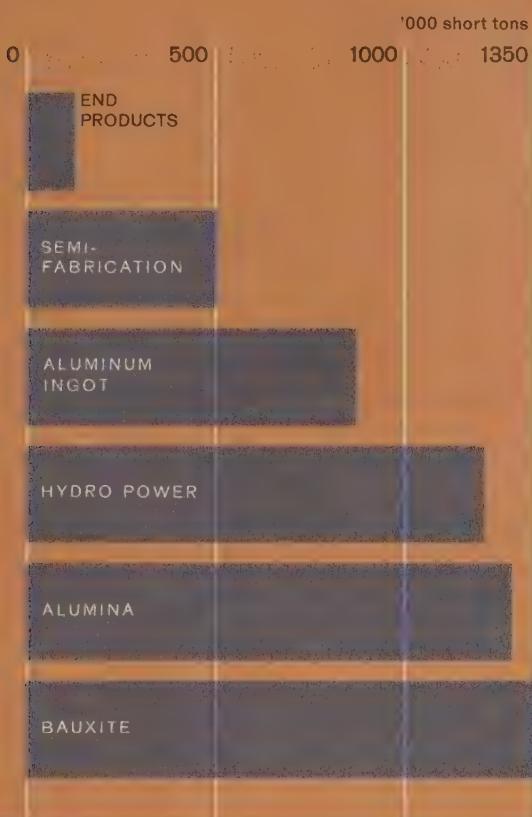
In its principal operations in 1964, the Company experienced generally satisfactory relations with trade unions representing its employees and there were no labor disputes which had a significant impact on production. A new collective agreement, extending to November 1967, was negotiated with the unions at the various smelters and other installations in Quebec. In British Guiana, at the bauxite and alumina plants, there were work stoppages arising out of the political unrest in the summer. Currently a new contract is under negotiation with the union representing employees at this location but production is proceeding in the absence of a new contract.

In the field of research and technical advancement, work continues on the basically new process for the production of primary aluminum which has been under active development by the Company for more than ten years at an annual expense of approximately five million dollars in the past few years. The construction of a large installation at Arvida, Canada, for producing aluminum by this process was completed during 1964. For the past several months, the trial operation of individual stages of the process and the training of technical staffs have been under way, looking to the start-up of the plant as a complete unit, but still on an experimental basis, in 1965. Some delays, amounting in total to several months, have been occasioned by minor equipment problems. These delays do not in themselves give rise to any special concern as to the basic economics of the process nor are they of serious implication in relation to a project which has already been a long time in development.

The Company enters 1965 with the industry as a whole operating a few percentage points below capacity. Modernization of existing facilities, and projects in hand for new smelting facilities, indicate the probability that something

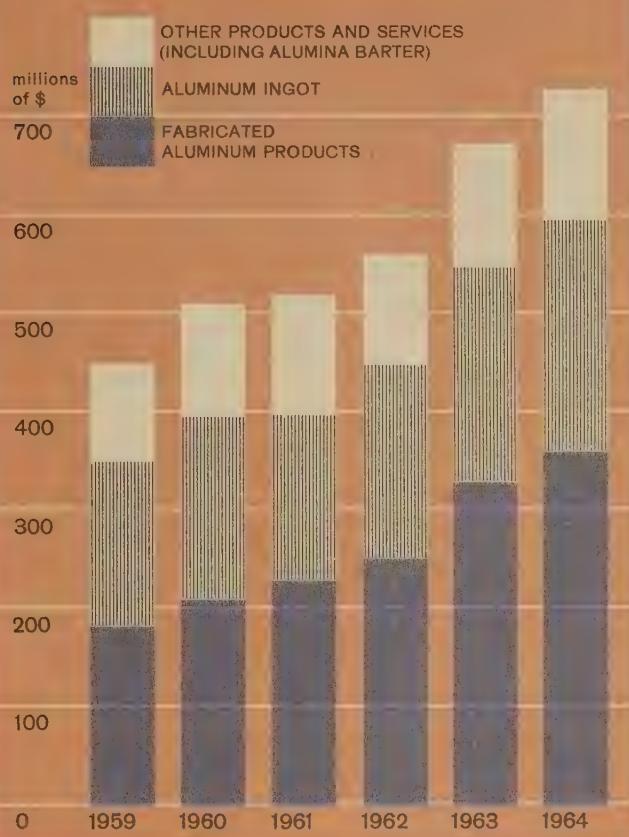
IV

**Aluminium Limited Consolidated—Degree of Integration**  
effective capacities expressed in terms of primary aluminum  
(5 January 1965)



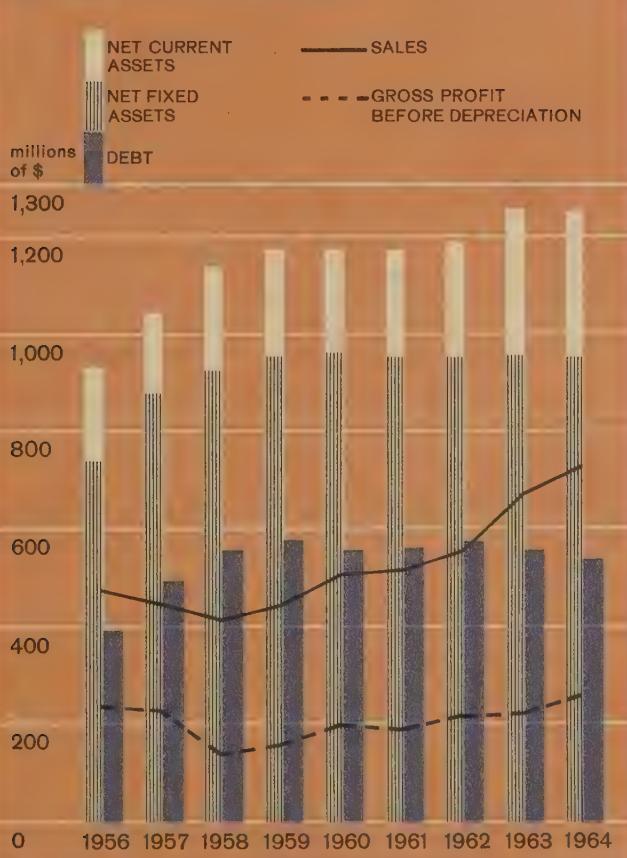
V

**Aluminium Limited Consolidated—SALES**



VI

**Aluminium Limited Consolidated**



VII

**Aluminium Limited Consolidated**



*Hot reroll coils coming off one of the most powerful aluminum mills in the world, that of Alcan Aluminum Corporation at Oswego, New York. Coils weigh up to ten tons each.*

10 of the order of 400,000 tons of additional smelter capacity will be brought into existence by the industry in the course of 1965. Accordingly, there should be ample supplies of metal available to meet a further increase in consumption over the next few years.

While the current market outlook is favourable, after three successive years of above-average growth in aluminum consumption a return to more normal levels of growth may be a more realistic possibility. Competition remains strong, both at the primary and fabricating levels.

The higher prices for primary products are holding quite well and should continue to have a beneficial effect on the Company's results. Fabricated prices in several markets, particularly the United States, are, however, at levels which fail by a large margin to provide an adequate return on capital investment. It is therefore in the area of fabricated and semi-fabricated products where improved prices must be realized if the Company and the industry are to earn profits commensurate with the capital investment. Additionally, the Company should benefit from reduced costs as the large number of new fabricating facilities in many areas settle into normal operations.

As a result of the acquisition of sheet-rolling facilities in the United States, the Company is now launched in a new market. The consolidation of these facilities into the Company's overall activities will require much time and effort and in the near term will adversely affect the Company's earnings. Looking ahead, however, the potential for expansion exists and it is hoped that over a period, economies in operations can be obtained and the newly-acquired facilities should significantly strengthen the Company's position.

The improvement in the Company's fortunes in 1964 is to

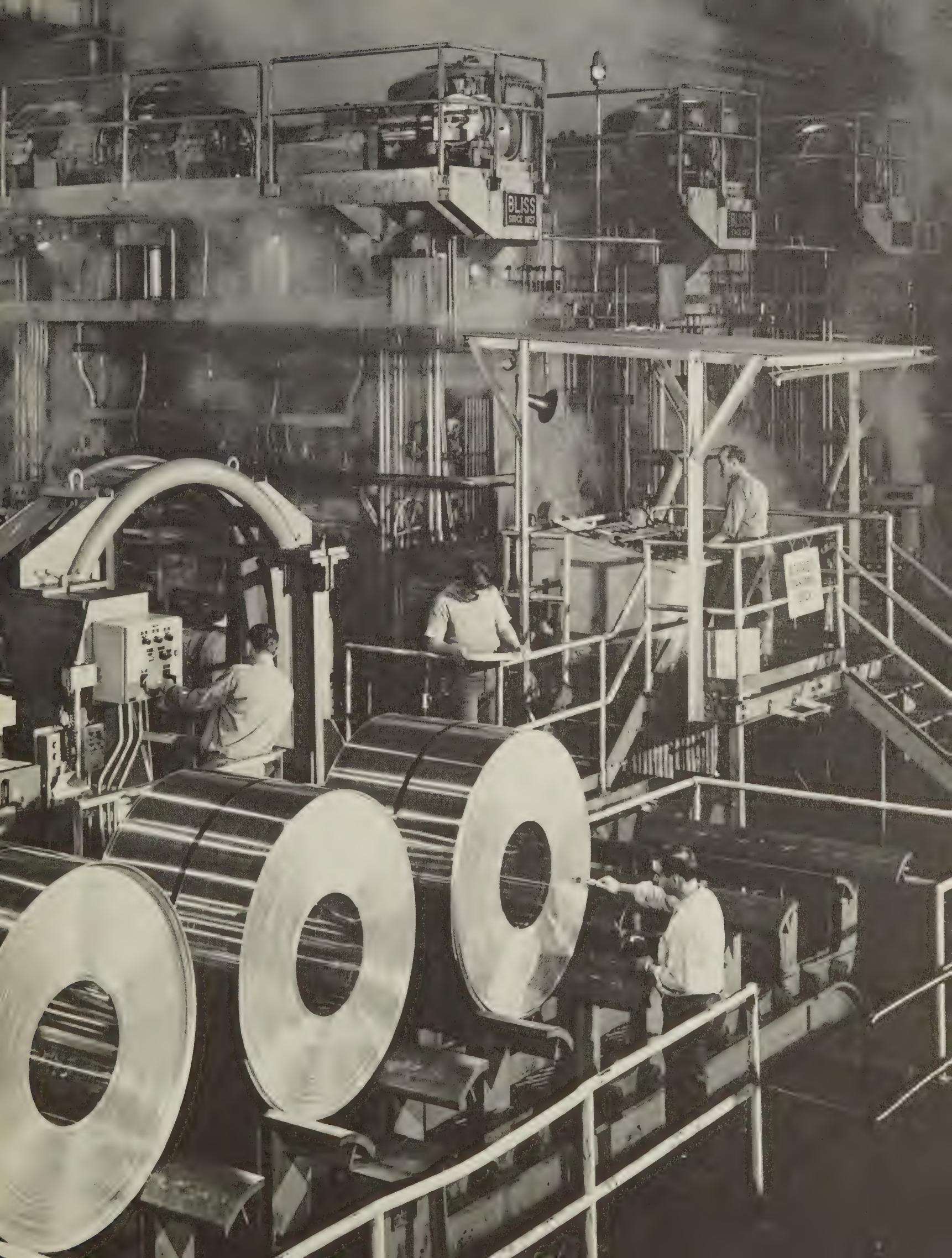
a considerable degree the result of prolonged hard work and enthusiastic service by our large international family of employees and management teams over the past several years. To all of them everywhere, and particularly to our employees in British Guiana who had a most difficult year in 1964, I express gratitude on behalf of the Board of Directors.

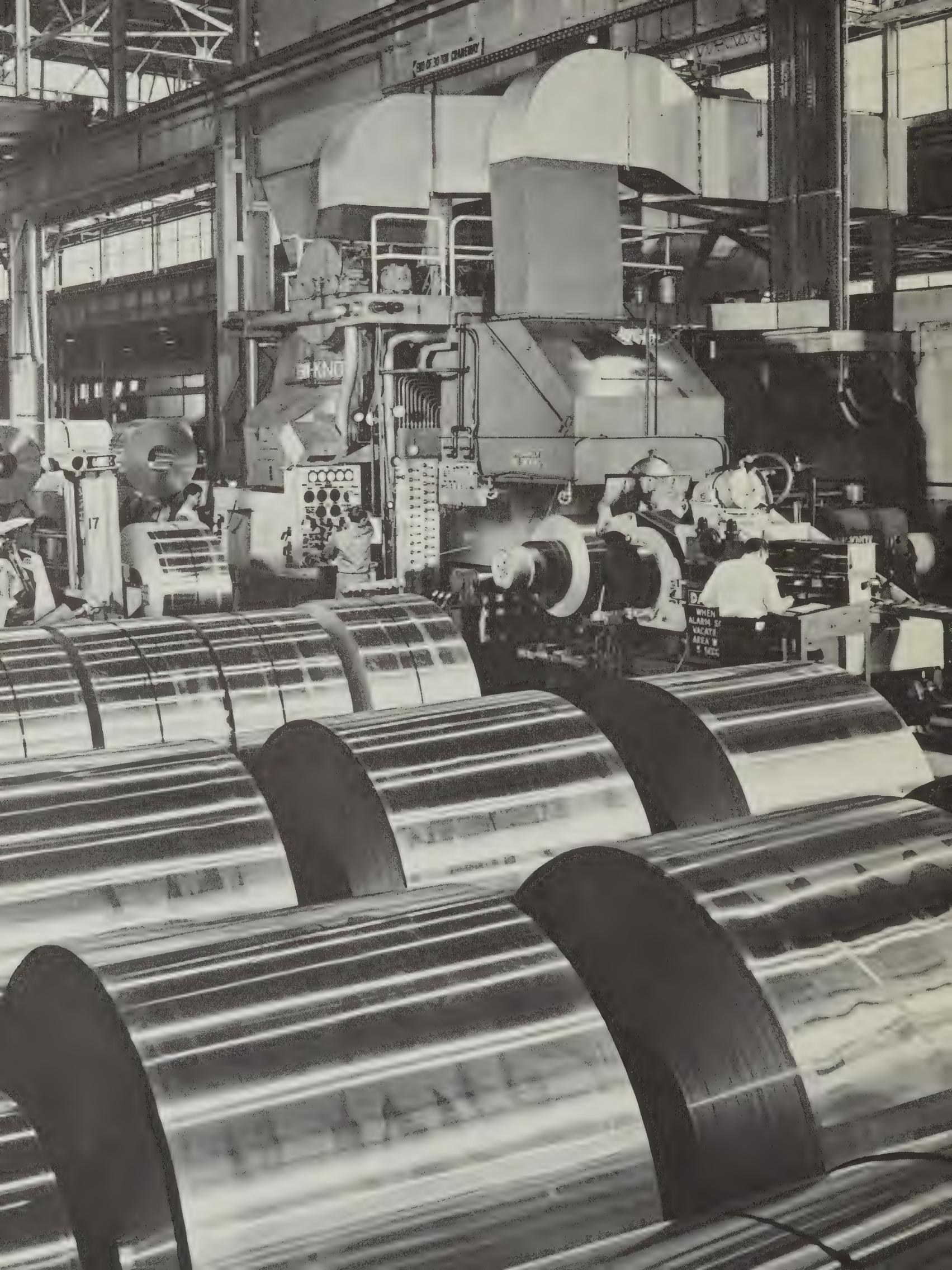
*Nathanael V. Davis*

Montreal, Canada.  
February 24, 1965.

President

THE ANNUAL MEETING of the shareholders of Aluminium Limited will be held on Thursday, April 29, 1965, at 11 a.m. in Place Ville Marie, Montreal. All shareholders entitled to attend and to vote at that meeting will be mailed a full notice of the meeting after March 30, 1965.





*Modern cold rolling facilities of  
Alcan Aluminum Corporation at Warren, Ohio,  
and coils of aluminum sheet ready for  
sale to manufacturing customers.*

## **Review of the year 1964**

### *Canadian Smelter Operations*

Aluminum Company of Canada, Limited produced 740,400 tons of primary aluminum in 1964, compared with 625,600 tons in 1963, 596,200 in 1962 and 569,200 in 1961.

Additional smelter capacity of 20,000 tons per annum was brought into production at Kitimat at the end of February, 1964, increasing the installed capacity of this smelter to 212,000 tons and Alcan's total rated capacity to 808,000 tons. A completely modernized pot-line was put into production at Arvida in June.

Alcan's average rate of smelter operation in 1964 was 92 percent of capacity. At the year end, Alcan was producing at about 94 percent of capacity.

In January, 1965, because of the increasing primary metal inventories, the rate of production at the Arvida smelter was reduced by 35,000 tons per annum by the shutdown of two pot-lines, effectively lowering Alcan's overall smelter production to 89 percent of capacity.

Alcan enjoyed satisfactory industrial relations with its employees at all locations during the year. New three-year labour contracts, running until November 1967, were negotiated, without work stoppage, with the employees of all the smelters in the Province of Quebec.

### *Other Smelter Operations*

In 1964, Aluminium Limited's smelting subsidiaries and affiliates outside of Canada operated at almost full capacity, to produce a total of 244,000 tons, compared with 214,000 tons in 1963 and 194,000 tons in 1962. These

overseas smelters had a rated capacity of 250,000 tons at the end of 1964, reflecting various expansions of their primary capacities to meet the requirements of their domestic markets.

In Brazil, Aluminio Minas Gerais S.A., a subsidiary, operated at its full capacity of 16,000 tons per annum, and is planning to expand its facilities.

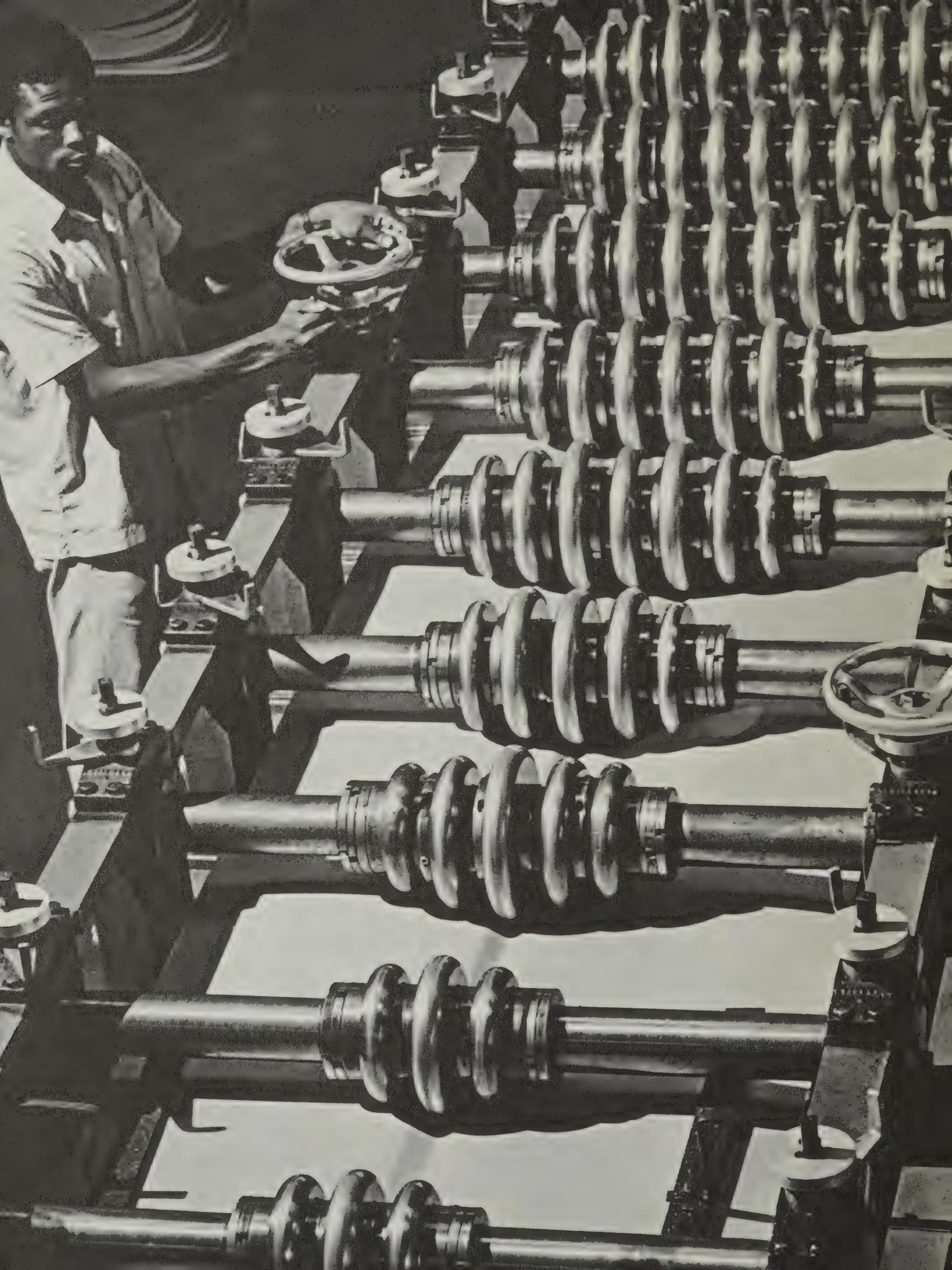
In India, Indian Aluminium Company, Limited, a subsidiary, will complete the first half of the two-stage 11,000-ton expansion of its smelter at Alupuram during the first quarter of 1965. With completion of the second-half of that program early in 1966, the company's total smelter capacity will be increased to 42,000 tons per annum. During the year, work was begun on the engineering for a new integrated bauxite, alumina and smelter and fabricating development on the West Coast of India which is planned to add a further 33,000 tons of smelter capacity early in 1968.

In Japan, the Nippon Light Metal Company, an affiliate, progressed with its flexible program for the gradual expansion of its smelters at Niigata and Kambara, with the objective of raising total capacity to 150,000 tons per annum by mid-1966.

In Norway, A/S Norsk Aluminium Company, an affiliate, continued its program for the expansion of power and smelting facilities at Høyanger which will result in the doubling of total smelter capacity to 29,000 tons per annum in mid-1965.

In Sweden, A/B Svenska Metallverken, an affiliate, made plans to enlarge the capacity of its 32,000-ton per annum smelter at Kubikenborg, by 19,000 tons per annum, by the end of 1967.





Corrugating of aluminum sheets for roofing and siding in tropical countries is a modern trend in market development. This operation in Ghana is one of several in Africa and Asia.

### Hydro Electric Power

Demands on the Saguenay power system, in Quebec, including secondary power sales, required the operation of the power facilities at capacity levels at year end. In British Columbia, power operations are running at the rate of 71 percent of capacity.

Total Group power sales in Canada, including both primary and interruptible power, amounted to \$20.8 million, an increase of 7 percent over 1963.

### Raw Materials

In British Guiana, Demerara Bauxite Company, Limited produced 1,870,000 tons of bauxite of all grades and 331,000 tons of alumina. Serious political and racial disturbances, and adverse climatic conditions, reduced the production of bauxite but the situation has since improved.

In Jamaica, the alumina plants of Alcan Jamaica Limited produced a total of 832,000 tons. Plant modifications at the Kirkvine plant during the year expanded total alumina capacity to 870,000 tons per annum. Reinforcement of the Ewarton plant will begin in 1965, to increase the company's alumina capacity by a further 40,000 tons per annum. Supplies of bauxite to Alcan from Group companies were supplemented during the year by purchases from third parties, both under long term contract and on a spot basis.

In France, Société Anonyme des Bauxites et Alumines de Provence, a subsidiary, produced 432,000 tons of bauxite in 1964.

In Malaysia, Southeast Asia Bauxites Limited, a subsidiary in Malaya, and Sematan Bauxites Limited, an affiliate in Sarawak, continued satisfactory operations.

In Australia, good progress is being made toward the completion, in 1967, of a 672,000-ton per annum alumina plant in Queensland, in which the Company has a 20 percent share. The plant is being built jointly with Kaiser Aluminum and Chemical Corporation, Pechiney of France, and Conzinc Riotinto of Australia Limited.

Fluorspar shipments by Newfoundland Fluorspar Limited, a subsidiary, from St. Lawrence, Newfoundland, to Arvida, Quebec, amounted to 96,000 tons.

### Fabricating

Consolidated sales of 354,600 tons of semi-fabricated products, which exceeded those in 1963 by some 7 percent, were a further measure of the progress of the Company's continuing program of forward integration. Profit margins in fabricating remained at unsatisfactorily low levels.

Total shipments to third parties from the fabricating plants in which Aluminium Limited owns an equity interest, including those of all important non-consolidated

fabricating affiliates, amounted to 590,000 tons compared with 497,000 tons in 1963.

The expansion of the Company's fabricating facilities continued in 1964, with a cash outlay of \$38.5 million.

A major addition was the acquisition of important foil rolling facilities in the U.K. Effective January 5, 1965, the Company acquired 100,000 tons of sheet rolling and finishing capacity through the purchase of six plants in the United States.

The principal developments in this field in 1964 and in January, 1965, in 15 countries, were: —

### North America

CANADA — In April, Alcan's aluminum foundry facilities in Etobicoke were sold to Chrysler Canada Limited. At the same time, an agreement was made with one of Canada's major secondary smelters to ensure for Alcan increased participation as a metal supplier in the rapidly growing market for automotive castings. In September, Alcan established an Aluminum Siding Division in Toronto for the manufacture of residential siding and accessories.

In November, Alcan completed arrangements for the purchase of Almetco Manufacturing Corp. Ltd., the largest fabricator of aluminum windows in Western Canada, with a plant near Vancouver.

U.S.A. — Construction of Central Cable Corporation's new 8,000-ton cable plant at Williamsport began early in 1964, for completion in 1965.

The facilities taken over in January, 1965, and now operated by the newly-organized U.S. subsidiary, Alcan Aluminum Corporation, include the following: —

1) The modern high-speed semi-continuous hot-rolling plant at Oswego, New York, which produces reroll coils and plate stock;

2) Two cold rolling and finishing plants at Warren, Ohio, and Fairmont, West Virginia, each capable of producing more than 30,000 tons of coiled and flat sheet products per annum;

3) Two plants at Riverside and Los Angeles, California, with continuous casting and rolling machines and cold rolling equipment which can together produce about 30,000 tons of coiled sheet per annum. Much of the sheet is sold in painted form. The Riverside plant also produces components for the production of venetian blinds and awnings, residential siding and cold forged products.

4) A plant at South Kearny, New Jersey, which produces pre-formed and painted residential siding from coiled sheet.

Alcan Aluminum Corporation has a total of approximately 2,000 employees.

### Europe

DENMARK — Aluminord A.S. ordered an extrusion press.

FRANCE — Aluminium Alcan de France placed orders for a third extrusion press and auxiliary equipment. Warehousing, shearing and finishing facilities for sheet products were installed at the Lucé plant.

GERMANY — Alcan Aluminiumwerke G.m.b.H. initiated plans to install an extrusion press in the Uphusen plant by the end of 1965.

ITALY — Angeletti and Ciucani Fonderia Laminatoio S.p.A. began the installation of an additional extrusion press in its plant near Milan, through a subsidiary company.

NORWAY — A/S Nordisk Aluminiumindustri completed the expansion of its sheet rolling capacity to 25,000 tons per annum.

REPUBLIC OF IRELAND — A 25 percent interest was acquired in Unidare Limited, with a plant near Dublin, manufacturing a wide range of electrical cable and equipment from aluminum and copper, and aluminum foil, extrusions, strip and circles.

SPAIN — "Alcan" Aluminio Iberico S.A. began a progressive expansion program designed to increase its sheet capacity to 28,000 tons per annum.

UNITED KINGDOM — Alcan Industries Limited brought a new extrusion press into operation at its Birmingham plant. Modernization of the extrusion facilities at the Rogerstone and Banbury plants was initiated, including the installation of a new press at Rogerstone. Alcan Industries has acquired Fisher's Foils, one of the principal aluminum foil-rollers in the U.K., and a long time customer for aluminum foil stock, and will carry on and expand the foil business.

### Africa

Alcan Aluminium of South Africa Limited brought into production, in July, a 6,800-ton per annum expansion of

its Pietermaritzburg sheet plant. A third extrusion press was planned for installation in 1965.

### Asia

INDIA — Indian Aluminium Company, Limited, made satisfactory progress with the construction of its new foil mill at Kalwa, which is expected to be operative in mid-1965. A Properzi rod casting machine was planned for installation at the Alupuram plant. A new 16,500-ton per annum sheet plant is being planned in connection with the integrated expansion program on the West Coast (See "Other Smelter Operations" — page 14).

JAPAN — Toyo Aluminium K.K. added a fifth foil mill to its plant near Osaka. Nikkei Aluminium Company, Ltd. began the installation of an additional extrusion press, and the construction of a new window fabrication plant in the Tokyo area.

### Oceania

AUSTRALIA — Australian Aluminium Company Limited began a program for modernizing and augmenting its extrusion facilities.

NEW ZEALAND — Alcan Industries Limited completed the installation of a new extrusion press at its Wiri plant, and planned to augment the plant facilities with a Properzi rod casting machine.

### Markets and Sales

Free world total consumption of aluminum increased by approximately 14 percent in 1964, reaching a new record level. Free world primary production is estimated to have increased in 1964 by approximately 13 percent over 1963, while capacity to produce grew by some 3 percent. While this resulted in a welcome reduction in the large excess capacity which has overshadowed the industry since 1957,

### Aluminium Limited - Geographical Distribution of Consolidated Sales of Aluminum

	in short tons				
	1960	1961	1962	1963	1964
Canada.....	70,200	75,000	83,200	93,800	100,800
United States.....	109,100	129,300	211,400	258,000	232,200
United Kingdom.....	145,600	139,600	133,600	145,700	174,100
All Others.....	391,300	327,200	301,500	364,100	355,400
<b>TOTAL.....</b>	<b>716,200</b>	<b>671,100</b>	<b>729,700</b>	<b>861,600</b>	<b>862,500</b>



ALFARERIA INDUSTRIAL MEXICANA, S.A.



surplus capacity and production were still an influence on international trading patterns.

Estimated free world consumption in 1964, was approximately 6,650,000 tons, made up of 5,200,000 tons of primary aluminum and 1,450,000 tons of secondary metal, compared with 5,850,000 tons in 1963. Free world primary production in 1964 was approximately 5,290,000 tons compared with 4,690,000 tons in 1963 and 4,260,000 tons in 1962.

As in 1963, the largest tonnage gain took place in the U.S., where total domestic consumption rose by almost 15 percent to 3,500,000 tons. Canadian consumption increased by about 14 percent.

In the European Common Market, overall consumption rose by over 10 percent, due in large measure to very strong demand in West Germany. In the United Kingdom aluminum consumption rose by about 15 percent, despite a levelling off in the economy generally.

In Japan, aluminum consumption increased by more than 15 percent, continuing the trend in 1963, although there were some signs of a slowing down in the growth of the rate of demand at the end of the year.

In India, consumption, which in effect is subject to Government control, increased slightly, paralleling a small increase in domestic smelter capacity. Imports of aluminum continued under the aid programs of Canada and the United States.

In Australia, consumption increased by over 15 percent, continuing the upward trend started in 1962.

In Latin America, overall consumption increased slightly, despite continuing economic problems, and declines in some countries, including Brazil.

Although supply and demand continued to move into better balance in 1964, price competition remained severe, particularly for semi-fabricated products. However, prices

of aluminum ingot continued to increase moderately during the year, continuing the partial recovery begun in the last quarter of 1963.

In March, the Company initiated an increase in the ingot price from U.S. 23 cents to U.S. 24 cents a pound in markets outside North America, and from Can. 24½ cents to Can. 25½ cents a pound in Canada. At the same time, the United States producers raised the ingot price in their home markets from U.S. 23 cents to U.S. 23½ cents a pound. Subsequent price increases in the U.S., initiated by the U.S. producers, raised the domestic ingot price to U.S. 24 cents a pound in June, and to U.S. 24½ cents a pound in November, and the Company raised the ingot price in Canada to Can. 26 cents a pound. Finally, in November, the ingot price in markets outside of the U.S. was increased from U.S. 24 cents a pound to U.S. 24½ cents.

The strengthening of the ingot price was reflected in higher list prices for some semi-fabricated products, particularly outside North America.

Sales of aluminum by Aluminium Limited's consolidated subsidiaries, in all forms, and from all sources, amounted to 862,500 tons in 1964, as compared to 861,600 tons in 1963, and 729,700 tons in 1962. Aluminium Limited's total volume of sales did not keep pace with the overall increase in consumption in free world markets, because of the Company's determined and successful efforts to achieve a more reasonable return on sales.

Consolidated shipments of semi-fabricated products amounted to 354,600 tons in 1964, compared with 330,700 tons in 1963. Shipments of ingot products by consolidated companies to partially-owned but not consolidated semi-fabricating affiliates totalled 89,700 tons, compared with 95,400 tons in 1963. Purchases of non-Company metal from third parties were higher than in 1963, because of restrictions on the import of primary aluminum imposed by some countries, and for other local reasons.

#### Aluminium Limited and Consolidated Subsidiaries - Analysis of Consolidated Sales

	Ingot and Ingot Products		Semi-Fabricated Products		All Other Products	Operating Revenues	Totals	
	Tons	\$'000	Tons	\$'000	\$'000	\$'000	Tons	\$'000
1960.....	486,767	210,425	229,389	206,942	35,147	56,117	716,156	508,631
1961.....	429,514	193,161	241,606	226,585	40,465	56,720	671,120	516,931
1962.....	470,419	212,047	259,253	250,284	41,237	55,407	729,672	558,975
1963.....	530,854	233,185	330,700	326,037	53,543	57,044	861,554	669,809
1964.....	507,966	236,872	354,580	358,115	67,438	65,125	862,546	727,550

Consolidated sales of ingot products, other than to affiliated semi-fabricating plants, totalled 418,300 tons, a decrease of 17,200 tons compared with the tonnage sold in 1963. The loss in sales to independent customers was balanced by the increase in shipments through the Company's subsidiary fabricating companies.

The results of the Company's program of recent years to expand the semi-fabricating side of its business may be seen in an analysis of the total consolidated sales in terms of the main classifications of semi-fabricated commodities. This analysis, reproduced below, shows that sales of semi-fabricated products, castings and manufactures increased from 32 percent of total sales in 1959 to 41 percent of a much larger total sales tonnage in 1964. The tonnage increase has been greatest in the Sheet Products sector, with a growth of 68,000 tons or about 56 percent. The greatest relative increase occurred in Extrusions, Tubing and Forgings which nearly trebled their tonnage sales while Cable and Rod products have shown growth of 75 percent.

## 22 ALUMINIUM LIMITED CONSOLIDATED ALUMINUM SALES BY PRODUCT GROUPS

	1959		1964	
	'000 tons	%	'000 tons	%
Sheet Products	121	19	189	22
Extrusions, Tubing, Forgings	25	4	63	7
Cable, Rod, Wire and Bar	44	7	77	9
Castings and Manufactures	16	2	26	3
Total Semi-fabricated and Fabricated	206	32	355	41
Ingot and Ingot Products	440	68	508	59
Total Sales	646	100%	863	100%

Sales of calcined bauxite to the refractory and abrasive industries continued at high levels during the year, despite some interruptions of production in British Guiana, where an additional calcining kiln was brought into operation at the Mackenzie plant. Alumina shipments to Scandinavian aluminum smelters, to Europe, the United States, and elsewhere, for sale or under long term metal exchange contracts, were continued.

The Company's sales of industrial chemicals continued to grow in 1964 and increased their contribution to the consolidated net income, despite intensive competition in both domestic and international markets. In particular,

there were sizeable gains in sales of aluminum sulphate, aluminum fluorides, and special aluminas used by the ceramic and refractory industries.

## Magnesium

The Company increased its sales of magnesium in 1964. Although prices had stabilized by the end of the year, there is still room for improvement in the rate of return on sales. As in previous years, magnesium die-casting ingot for the automotive industry, and metallurgical end uses, were the Company's major markets for magnesium.

## Transportation

Saguenay Shipping Limited carried on a varied shipping program well integrated with the raw material procurement and sales requirements of the Aluminium Limited group of companies, at a cost that reflected the benefit of its program for the progressive upgrading of the quality of the vessels operated. With its total cargo commitments the company continued its contribution to expanding international trade.

## Capital Expenditure and Financing

In 1964, the Company's expenditure on plant and investments amounted to \$70 million, of which \$38.5 million was devoted to the continuing expansion of fabricating plants, including the purchase of important foil producing facilities in the United Kingdom. The Company's total outstanding debt, both long and short-term, was, in the aggregate, reduced during 1964 by \$36 million, including voluntary debt redemptions.

The completion, in January 1965, of the purchase of fabricating plants and related assets in the United States, and of the minority interest in Alroll, Inc., and Alplate, Inc., will increase the Company's gross assets in consolidation by some Can. \$100 million. The net consideration for all these acquisitions was U.S. \$68 million which, under the terms of the related purchase agreements, was satisfied by the payments of U.S. \$40 million in cash and the issuance of U.S. \$28 million non-interest bearing subordinated serial notes due 1966-1975.

In February 1965, Alcan Aluminum Corporation borrowed U.S. \$40 million through the issuance of 20-year 4 3/4 percent notes, using part of the proceeds to repay U.S. \$25 million of debt issues of the former Alroll, Inc. and Alplate, Inc.

Apart from the initial cost of the purchase of the fabricating plants in the United States, capital expenditures of approximately \$75 million are planned for 1965, of which some 40 percent will be devoted to the continuing expansion of fabricating facilities.





Aluminum is particularly well adapted to the extrusion method of fabricating, producing shapes and profiles of intricacy and strength without loss of economy. This employee of Alcan Aluminium of South Africa contributes his essential skill to the success of the operation.

## Litigation

On December 30, 1964 Aluminium Limited, Alcan Aluminum Corporation, its wholly owned subsidiary, and National Distillers and Chemical Corporation were served with a summons and complaint in a civil action in the United States District Court for the District of New Jersey in which the United States Government charged that Section 7 of the Clayton Act would be violated by the proposed acquisition by Alcan Aluminum Corporation of the assets of National Distillers' Aluminum Division. A temporary restraining order, granted without notice on December 30, was lifted on January 5, 1965, and the case set down for trial on the merits on June 7, 1965. It is the Company's intention to oppose the U.S. Government's action.

## Shareholders

In 1964, the Company made an offering of common shares to employees under the employee share purchase plan approved by the shareholders on April 30. The price per share to the 30,821 eligible employees was Can. \$30.40 which was 92 percent of the mean of the high and low sales prices of the Company's common shares on the Montreal Stock Exchange on April 30.

## Research and Development

The status of the Company's development work on the Monochloride Process is described on page 8.

Long term research and development programs on the Hall and Bayer Processes were continued. Successful translation to a commercial scale of results from these programs enabled improvements in plant efficiencies and in product quality.

Capital expenditures on buildings and equipment for research and development were greater than usual. Major items included construction of a new wing for the research laboratory at Kingston, Ontario, and a smaller extension of the laboratory at Arvida, Quebec, and the commissioning of a multichannel X-ray fluorescence unit and a production control quantometer with associated digital computer at Arvida. The recently acquired electron microprobe analyzer and electron microscope, located in the Banbury Laboratory, were fully utilized. These new facilities substantially extend the Company's capabilities in the fields of research development and production control.

In the fabricating field, significant improvements in ingot quality were made through the application of new methods for controlling metal preparation and pouring techniques.

Earlier research in the field of lubrication was applied on a substantial scale in Group fabricating plants in various countries, while continued laboratory research in the field disclosed additional attractive lines of attack.

Alcan maintained its favourable position as a preferred supplier of extrusion ingot by offering three new alloy products, all giving increased extrusion speeds without loss of strength and finishing characteristics. Considerable progress has been made in the development of the aluminum — magnesium — zinc alloys for general purpose structural applications, particularly in rail and truck bodies.

In the field of new applications there was a major increase in the demand and acceptance of colored aluminum components in the building and architectural fields. A new self-colored anodizing process, developed in the Company's laboratories, was introduced in Great Britain under the name "Alcanodox", and painted sheet for



ALUMINIO IBÉRICO

ORÍGEN DE ALICANTE

VER A ALICANTE

SENROL

The fast-growing demand for electrical energy in all countries old and new alike, requires prodigious quantities of aluminum for high tension transmission cables and low-tension distribution circuits. Coiled on large wooden reels, such cable leaves the plant of "Alcan" Aluminio Iberico in Spain.

cladding was introduced in several markets. The development of aluminum pipelines is moving forward and successful installations were completed in Holland and Nigeria. The acceptance of aluminum as a material for cans and in packaging generally continued its rapid growth, and further gains were made in the heavy transport field. Geological work more than maintained the Company's bauxite reserves and preliminary investigations of some likely new bauxite areas revealed interesting possibilities which are being actively pursued.

#### Public Relations

In all of its main areas of operations and particularly in Canada, the Caribbean area and the United States, the Company conducts a continuing program of public relations and information at local and national levels to increase the degree of understanding of its objectives and policies. In most areas of sales activities, various information and advertising programs also lend support to the selling effort.

In Canada, Alcan is a frequent sponsor of television programs on English and French language networks. In the United States, in 1964 and early 1965, Aluminium Limited returned to the sponsorship of network television with the highly-regarded series entitled "Profiles in Courage". The Sunday evening program, based on a book of the same name by the late President John F. Kennedy, has received wide acclaim and has achieved the Company's aims in undertaking its sponsorship.

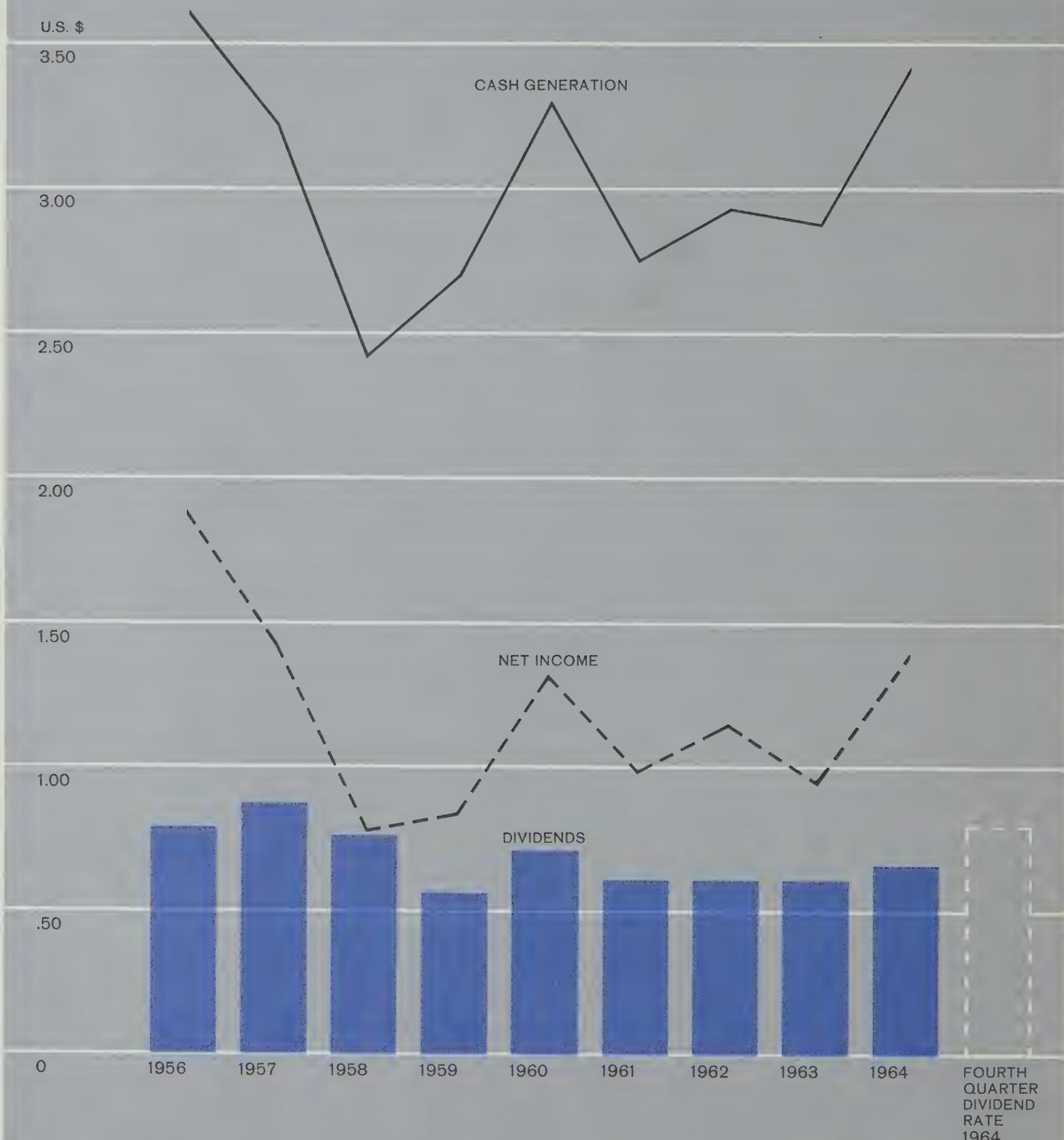
#### Employees

The operations of the Company's consolidated subsidiaries on all continents required the services of an average

number of 54,541 employees in the last six months of 1964. Their geographic distribution by major areas was as follows:

CANADA.....	17,684
UNITED KINGDOM.....	7,115
CARIBBEAN	
Jamaica.....	2,849
British Guiana.....	4,943
Trinidad.....	672
	8,464
EUROPE	
Italy.....	533
Switzerland.....	937
Germany.....	3,419
France.....	413
Other.....	121
	5,423
LATIN AMERICA	
Argentina.....	483
Brazil.....	4,008
Mexico.....	913
Uruguay.....	163
Other.....	231
	5,798
ASIA	
India.....	4,786
Other.....	454
	5,240
AFRICA.....	
UNITED STATES.....	775
OCEANIA.....	2,318
TOTAL.....	54,541

Aluminium Limited Consolidated—U.S. \$ PER COMMON SHARE



Comparative financial statistics (as adjusted)

Year	Total Assets before Reserves	Sales and Operating Revenues	Net Income before Depreciation and Income Taxes	Current Income Taxes	"Cash Income" <sup>(1)</sup>	Number of Common Shares <sup>(2)</sup> (Millions)	Capital Stock & Surplus	Per common share	
								Profit <sup>(3)</sup>	Cash Dividends
(Millions of Canadian Dollars)						(Canadian Dollars)			
1930	75	26	3	1	2	18.9	1	.03	0
1931	81	22	1	1	0	19.5	1	—.08	0
1932	81	13	1	0	1	19.6	1	—.08	0
1933	84	14	2	0	2	19.6	1	—.05	0
1934	83	21	2	0	2	19.6	1	—.02	0
1935	84	26	2	0	2	19.6	1	.01	0
1936	88	32	4	0	4	20.7	1	.09	0
1937	98	49	13	2	11	22.3	2	.36	0
1938	144	66	20	5	15	22.3	2	.49	0
1939	158	92	28	8	20	22.3	3	.69	.14
1940	209	82	38	22	16	22.3	3	.49	.27
1941	324	132	53	15	38	22.3	3	.65	.33
1942	446	198	75	12	63	22.3	4	.69	.33
1943	528	290	96	14	82	22.3	4	.52	.33
1944	523	259	81	11	70	22.3	4	.49	.27
1945	480	114	26	8	18	22.3	4	.52	.27
1946	490	111	28	10	18	22.3	5	.54	.30
1947	514	153	38	15	23	22.3	5	.72	.33
1948	587	209	56	20	36	22.3	6	1.22	.44
1949	612	197	57	20	37	22.3	6	1.21	.43
1950	698	226	73	26	47	22.3	7	1.56	.59
1951	809	283	92	36	56	24.6	9	1.51	.62
1952	972	332	95	35	60	24.6	9	1.44	.65
1953	1,124	336	96	26	70	27.0	10	1.41	.66
1954	1,180	327	94	21	73	27.1	11	1.29	.65
1955	1,310	414	123	26	97	29.9	12	1.61	.71
1956	1,468	481	138	31	107	30.0	13	1.85	.77
1957	1,629	454	112	8	104	30.2	14	1.37	.84
1958	1,734	421	80	9	71	30.3	14	.74	.73
1959	1,820	448	91	13	78	30.4	14	.79	.53
1960	1,906	509	122	25	97	30.6	15	1.28	.68
1961	1,952	517	110	25	85	30.7	15	1.00	.61
1962	2,046	559	128	32	96	30.7	15	1.23	.64
1963	2,173	670	125	28	97	31.0	16	1.01	.65
1964	2,258	728	164	47	117	31.1	17	1.52	.70

(1) 1950 and thereafter is before reserve for future income taxes—see note 5 to financial statements.

(2) Outstanding at end of each year, adjusted for stock dividends and splits.

(3) After preferred dividends.

30 **Source and application of funds** year ending 31st December 1964

in millions of Canadian dollars

	1964	1963
Cash, Time Deposits and Short-term Investments (beginning of period) . . . . .	\$ 72	\$ 41
<b>SOURCE OF FUNDS:</b>		
Net income . . . . .	50	33
Straight-line depreciation . . . . .	66	61
Reserve for future income taxes . . . . .	1	3
Aluminium Limited preferred shares . . . . .	—	60
Aluminium Limited common shares . . . . .	1	6
Other . . . . .	6	4
	<u>124</u>	<u>167</u>
	<u>\$196</u>	<u>\$208</u>

**APPLICATION OF FUNDS:**

Plant . . . . .	\$ 65	\$ 67
Investments . . . . .	5	1
Net decrease in debt not maturing within one year . . . . .	24	15
Net decrease in short-term bank loans . . . . .	12	(3)
Alcan preferred share redemptions . . . . .	2	2
Dividends on Aluminium Limited preferred shares . . . . .	2	1
Dividends on Aluminium Limited common shares . . . . .	22	20
Increase in working capital (excluding cash, time deposits and short-term investments, short-term borrowings and funded debt payable within one year) . . . . .	2	33
	<u>134</u>	<u>136</u>
Cash, Time Deposits and Short-term Investments (end of period) . . . . .	62	72
	<u>\$196</u>	<u>\$208</u>

PRICE WATERHOUSE & CO. 23rd February 1965

Canada Cement Building  
Phillips Square, Montreal 2

TO THE SHAREHOLDERS OF ALUMINIUM LIMITED:

We have examined the consolidated balance sheet of Aluminium Limited and consolidated subsidiaries as at 31st December 1964 and the related consolidated statements of income and earned surplus for the year then ended and have obtained all the information and explanations which we have required. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion and according to the best of our information and the explanations given to us and as shown by the books of the companies, the accompanying consolidated balance sheet and related consolidated statements of income and earned surplus, supplemented by the notes thereto, are properly drawn up so as to exhibit a true and correct view of the combined state of affairs of Aluminium Limited and consolidated subsidiaries as at 31st December 1964 and the results of their combined operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

We have also examined the accompanying statement of source and application of funds of Aluminium Limited and consolidated subsidiaries, which, in our opinion, summarizes fairly the changes in their combined financial position for the year ending 31st December 1964.

Pursuant to section 118 of the Companies Act, we report that the interest of Aluminium Limited in the profits for the year of the non-consolidated subsidiaries has been included in consolidated income only to the extent of dividends received.

*Price Waterhouse & Co.*  
Chartered Accountants

32 **Consolidated balance sheet - Assets** 31st December 1964

	in Canadian Dollars	
	1964	1963
<b>CURRENT ASSETS:</b>		
Cash . . . . .	\$ 33,242,211	\$ 33,294,844
Time deposits and short-term investments, at cost . . . . .	28,553,918	39,171,312
Receivables . . . . .	150,488,390	146,246,491
Inventories of aluminum, materials and supplies (note 2) . . . . .	264,741,358	235,399,224
	<hr/> 477,025,877	<hr/> 454,111,871
Deferred receivables . . . . .	10,411,735	9,149,222
Prepaid expense and deferred charges . . . . .	10,837,422	10,903,621
Investments in companies not consolidated, at cost (note 3) . . . . .	45,160,717	39,777,198
	<hr/>	<hr/>
Lands, plants, riparian rights, and facilities, at cost (note 4) . . . . .	1,715,036,850	1,659,035,396
Less: Accumulated depreciation and depletion (note 5) . . . . .	763,837,974	703,658,487
	<hr/> 951,198,876	<hr/> 955,376,909
	<hr/> <b>\$1,494,634,627</b>	<hr/> <b>\$1,469,318,821</b>

**Consolidated balance sheet - Liabilities** 31st December 1964

33

	in Canadian Dollars	
	1964	1963
<b>CURRENT LIABILITIES:</b>		
Payables . . . . .	\$ 76,852,962	\$ 69,946,703
Short-term borrowings (principally in foreign currencies) . . . . .	42,468,449	54,433,873
Income and other taxes . . . . .	52,219,797	26,088,425
Other debt payable within one year (note 6) . . . . .	8,317,972	6,111,220
	179,859,180	156,580,221
Debt not maturing within one year (note 6) . . . . .	525,827,348	552,052,412
Reserve for future income taxes (note 5) . . . . .	135,109,526	133,622,310
Preferred shares of consolidated subsidiaries, etc. (note 7) . . . . .	78,800,175	78,223,165
<b>CAPITAL STOCK AND SURPLUS:</b>		
4 1/4% Cumulative redeemable convertible preferred shares—par \$40— 1,500,000 shares outstanding . . . . .	60,000,000	60,000,000
Common shares—without nominal or par value— 31,050,817 shares outstanding (note 8) . . . . .	153,883,695	153,111,830
Earned surplus (note 9) . . . . .	361,154,703	335,728,883
	575,038,398	548,840,713
	\$1,494,634,627	\$1,469,318,821

Signed on behalf of the Board: NATHANAEL V. DAVIS, Director DANA T. BARTHOLOMEW, Director

# Aluminium Limited and Consolidated Subsidiaries

## 34 Consolidated statement of income year ending 31st December 1964

	in Canadian Dollars	
	1964	1963
<b>SALES AND REVENUES:</b>		
Sales . . . . .	\$662,424,498	\$612,765,067
Operating revenues (transportation services, power sales, etc.) . . . . .	65,125,242	57,044,419
Income from companies not consolidated . . . . .	3,315,360	2,741,604
Other income (note 10) . . . . .	4,362,592	2,750,021
	<hr/> 735,227,692	<hr/> 675,301,111
<b>COSTS AND EXPENSES:</b>		
Cost of sales and operating expenses . . . . .	473,157,033	451,824,678
Provision for depreciation and depletion (note 5) . . . . .	65,805,797	61,441,517
Selling, research and administrative expenses . . . . .	60,740,072	60,063,120
Interest on debt not maturing within one year . . . . .	24,809,698	26,534,590
Other interest . . . . .	4,134,208	4,188,970
Other expenses (note 11) . . . . .	3,490,349	2,421,100
	<hr/> 632,137,157	<hr/> 606,473,975
<b>Income before income taxes . . . . .</b>	<b>103,090,535</b>	<b>68,827,136</b>
Provision for current income taxes . . . . .	46,628,298	28,234,826
Reserve for future income taxes (note 5) . . . . .	1,487,216	3,304,128
	<hr/> 48,115,514	<hr/> 31,538,954
<b>Income after income taxes . . . . .</b>	<b>54,975,021</b>	<b>37,288,182</b>
Dividends on preferred shares of consolidated subsidiaries and other minority interest	5,218,099	4,554,414
<b>Net income . . . . .</b>	<b>\$ 49,756,922</b>	<b>\$ 32,733,768</b>

## Consolidated statement of earned surplus year ending 31st December 1964

	in Canadian Dollars
Earned surplus—31st December 1963	\$335,728,883
Net income for the year	49,756,922
	<hr/>
Aluminium Limited dividends:	385,485,805
Preferred	\$ 2,550,000
Common (1963—\$20,027,187)	21,781,102
	<hr/>
Earned surplus—31st December 1964 (note 9)	\$361,154,703

## Notes to financial statements

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### 1. Principles of Consolidation:

The consolidated financial statements include the accounts of all subsidiaries (companies more than 50% owned) with the exception of three partially owned subsidiaries, Alroll, Inc., "Alcan" Aluminio Iberico S.A. and Aluminium Conductors Limited, the inclusion of which would have no significant effect. All intercompany items and transactions, including profits in inventories, have been eliminated. Intercompany profits on sales to subsidiaries not consolidated are not significant.

In January 1965, the Company purchased the minority interests in two partially owned companies in the United States, Alroll, Inc. (see above) and Alplate, Inc., in which the Company held an equity interest at 31st December 1964 of 50.1% and 50.0% respectively. These two companies were then merged under the name of Alcan Aluminum Corporation which thereupon purchased the five aluminum fabricating plants and related assets referred to on pages 6 and 17 (the acquisition of certain of these facilities has given rise to judicial proceedings by the United States Department of Justice as more fully explained on page 25). The net consideration for all these acquisitions was U.S. \$68.4 million which, under the terms of the related purchase agreements, was satisfied by the payment of U.S. \$40.1 million in cash and the issuance by Alcan Aluminum Corporation of U.S. \$28.3 million non-interest bearing Subordinated Serial Notes due 1966-1975. As a result of the above acquisitions and merger, the consolidation of the accounts of Alcan Aluminum Corporation in January 1965 increased the gross assets of Aluminium Limited and Consolidated Subsidiaries by approximately Can. \$100 million including fixed assets of some Can. \$80 million. In February 1965, Alcan Aluminum Corporation borrowed U.S. \$40 million through the issuance of 20-year 4 3/4% notes, using part of the proceeds to repay U.S. \$25 million of debt issues of the former Alroll, Inc. and Alplate, Inc.

Accounts, other than Canadian currency accounts, included in the consolidated balance sheet are translated into Canadian dollars at rates of exchange current at 31st December 1964, except that (a) certain bank balances, inventories, investments and fixed assets with related reserves are at rates current at dates of acquisition, and (b) debts not maturing within one year, with a minor exception, are at rates current at dates of original borrowing.

### 2. Inventories of Aluminum, Materials and Supplies:

Inventories, as summarized below, are stated at lower of cost or market.

	1964	1963
Aluminum	\$160,232,406	\$136,013,857
Raw materials	69,615,824	69,415,453
Supplies	38,315,924	32,148,777
	<hr/>	<hr/>
Deductions for advance payments from customers against aluminum held for future delivery	268,164,154	237,578,087
	3,422,796	2,178,863
	<hr/>	<hr/>
	\$264,741,358	\$235,399,224

**3. Investments in Companies not Consolidated:**

	1964	1963
Companies more than 50% owned . . . . .	\$ 9,637,591	\$ 9,587,779
Companies 50% owned . . . . .	18,650,148	17,312,890
Companies owned 50% or more . . . . .	28,287,739	26,900,669
Companies less than 50% owned . . . . .	16,872,978	12,876,529
	<u>\$ 45,160,717</u>	<u>\$ 39,777,198</u>

The companies not consolidated owned 50% or more, in which the Company's investment amounted to \$28.3 million at 31st December 1964, are located primarily in Japan, Scandinavia and the United States (the companies in the United States became fully owned subsidiaries in January 1965—see note 1). Aluminium Limited's interest in the net assets of the companies owned 50% or more at 31st December 1964 aggregated \$46 million as indicated by the following summary.

ASSETS	(in millions of dollars)	LIABILITIES
Current assets . . . . .	\$ 115	Current liabilities . . . . .
Investments. . . . .	28	Funded debt . . . . .
Fixed assets . . . . .	194	Equity and advances:
Less: Depreciation, etc. . . . .	(70)	Aluminium Limited . . . . .
	<u>\$ 267</u>	Other shareholders . . . . .
		<u>\$ 267</u>

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Aluminium Limited's equity in the aggregate net income of these companies, which amounted to \$3.8 million in 1964, was included in consolidated income only to the extent of dividends received as follows:

	Equity in Net Income	Dividends Received
Companies more than 50% owned . . . . .	\$ .4	\$ .1
Companies 50% owned . . . . .	3.4	2.0
	<u>\$ 3.8</u>	<u>\$ 2.1</u>

**4. Lands, Plants, Riparian Rights, and Facilities:**

	1964	1963
Land and water rights . . . . .	\$ 59,195,316	\$ 58,629,946
Mineral properties, rights and development . . . . .	14,466,919	13,989,263
Buildings, machinery and equipment . . . . .	1,575,990,697	1,521,031,137
Uncompleted facilities . . . . .	11,845,095	31,791,364
	<u>1,661,498,027</u>	<u>1,625,441,710</u>
Construction work in progress . . . . .	53,538,823	33,593,686
	<u>\$ 1,715,036,850</u>	<u>\$ 1,659,035,396</u>

The amount shown for uncompleted facilities represents the expenditure for certain smelter facilities in British Columbia the construction of which was suspended in 1957 and has not been resumed.

Capital projects, other than those referred to in note 1, are expected to involve the expenditure of some \$75 million during 1965.

**5. Depreciation Policy and Reserve for Future Income Taxes:**

With minor exceptions, depreciation recorded in the accounts is calculated on a straight-line basis in respect of all completed facilities and the uncompleted facilities referred to in note 4.

Income tax regulations in Canada, and in certain other countries, permit the use (for the purpose of determining income taxes) of various forms of capital cost allowances which do not coincide with the amount of depreciation recorded in the accounts. These allowances generally exceed straight-line depreciation during the early life of new assets and later fall short of it.

When capital cost allowances utilized for determining income taxes exceed straight-line depreciation, an amount equivalent to the resultant reduction in current income taxes is charged to income and credited to Reserve for Future Income Taxes. When the allowances so utilized fall short of straight-line depreciation, resulting in higher current income taxes than would otherwise be payable, an appropriate portion of the reserve is transferred back to income.

**6. Debt not Maturing within One Year:**

	1964	1963
Aluminum Company of Canada, Ltd.:		
Revolving credit loans from banks, under U.S. \$60,000,000 credit agreement, convertible at the Company's option on or before maturity (1st May 1967) into term loans repayable in five equal consecutive annual installments beginning one year from date of conversion (U.S. \$22,000,000)	\$ 22,308,567	\$ 35,490,903
First mortgage 3½% sinking fund bonds, due 1974:		
Series "A" . . . . .	4,130,000	4,132,000
Series "B" (U.S. \$7,228,000) . . . . .	7,228,000	8,478,000
Commutation value of contractual obligation for annual payments secured by second hypothec— payable in Canadian currency and in United States currency, in equal parts . . . . .	5,925,000	6,225,000
3½% Sinking fund debentures, due 1971 . . . . .	25,010,000	28,446,000
3½% Sinking fund debentures, due 1970 (U.S. \$35,899,000) . . . . .	35,326,860	40,730,347
4½% Sinking fund debentures, due 1973 . . . . .	33,771,000	36,145,000
4½% Sinking fund debentures, due 1980 (U.S. \$92,600,000) . . . . .	89,615,835	96,769,618
5.10% Notes, due 1968/1992 (U.S. \$100,000,000) . . . . .	97,586,489	97,586,489
Redeemable notes—payable to the U.K. Government—interest and \$41,977,500 of principal abatable in certain circumstances as provided in the contracts under which they were issued:		
3% Notes, due 1971 . . . . .	54,950,000	54,950,000
3½% Notes, due 1971 . . . . .	24,975,000	24,975,000
3½% Notes, due 1974 . . . . .	40,000,000	40,000,000
Alcan Aluminiumwerke G.m.b.H.:		37
Mortgage loans (D.M. 25,250,000) . . . . .	6,628,454	6,792,518
Alcan Industries Limited:		
6% Debentures, due 1983 (£3,000,000) . . . . .	9,421,512	9,421,512
Bank loan, due 1967 (£3,000,000) . . . . .	9,015,625	4,534,500
Other debt (£171,875) . . . . .	518,428	1,493,923
Alcan Jamaica Limited:		
Bank loans, due 1968 (£4,000,000) . . . . .	10,815,620	10,815,620
Alcan (U.K.) Limited:		
Bank loans, due 1965/1969 (£3,000,000) . . . . .	8,988,900	—
Australian Aluminium Company Limited:		
7% Mortgage debenture stock, due 1965/1973 (A£3,000,000) . . . . .	6,489,948	6,489,948
7% Unsecured notes, due 1965/1967 (A£1,920,000) . . . . .	4,441,344	5,921,792
Non-interest bearing unsecured note, due 1968 (A£465,000) . . . . .	1,075,651	1,075,651
Indian Aluminium Company, Ltd.:		
6½% Debenture stock, due 1970/1975 (Rps. 28,449,085) . . . . .	5,656,985	5,825,285
Other debt (Rps. 10,050,000 and £500,000) . . . . .	3,788,199	5,356,308
Saguenay Power Company, Ltd.:		
First mortgage 3% sinking fund bonds, due 1971 (U.S. \$10,589,000) . . . . .	10,589,000	11,482,000
3% Serial debentures, due 1965 . . . . .	300,000	600,000
Other debt . . . . .	15,441,420	14,337,478
	533,997,837	558,074,892
Less: Debt payable within one year included in current liabilities (equivalent to \$8,317,972 at year-end rates of exchange) . . . . .	8,170,489	6,022,480
	<hr/> \$525,827,348	<hr/> \$552,052,412

Allowing for payments already made, sinking fund requirements over the next five years against the above debt, other than bank loans, amount to approximately \$6.0 million in 1965, \$15.4 million in 1966, \$21.8 million in 1967, \$25.5 million in 1968 and \$22.4 million in 1969.

**7. Preferred Shares of Consolidated Subsidiaries, etc.:**

	1964	1963
Cumulative Redeemable Preferred Shares:		
Aluminum Company of Canada, Ltd.:		
4% Sinking fund first preferred shares . . . . .	\$ 9,012,625	\$ 9,283,075
4½% Sinking fund second preferred shares . . . . .	51,948,150	53,235,500
Indian Aluminium Company, Ltd. 5% preferred shares . . . . .	1,329,200	1,329,200
	62,289,975	63,847,775
Minority interest in equity of consolidated subsidiaries . . . . .	16,510,200	14,375,390
	\$78,800,175	\$78,223,165

**8. Capital Stock:**

(Number of common shares and prices adjusted, where applicable, to reflect 1957 3 for 1 split).

The outstanding common shares were increased during 1964 as a result of the issuance, under the 1962 offering of the first Employee Share Purchase Plan, of 6,027 shares at \$22. This plan having expired no further offerings may be made thereunder.

As approved by the shareholders on 30th April 1964, two new share purchase plans were established, one for the employees of the Company and its subsidiaries generally and the other for employees of subsidiaries in the United States. These plans reserved 600,000 common shares for offering to employees until 30th April 1969, at not less than 92% of the market price at the time of the offering. The outstanding common shares were increased during 1964 as a result of the issuance, under the 1964 offering of these plans, of 9,681 shares at \$30.40. At 31st December 1964, 39,351 shares remained to be purchased by employees at \$30.40.

Further increases in 1964 resulted from the exercise of options for common shares as indicated in the following tabulation, which also summarizes other changes during the year in the status of outstanding options. These options were granted to officers and other employees under the first and second Share Option Plans, the option prices having been fixed, under the terms of the Plans, at the market prices ruling when the options were granted.

Option price and year of grant	Shares under option 1st January 1964	Year 1964		Shares under option 31st December 1964
		Exercised	Cancelled	
\$31.25 — 1955	178,814	10,055	—	168,759
36.50 — 1959	120,150	—	750*	119,400
30.75 — 1960	60,705	1,000	—	59,705
33.875 — 1961	1,500	—	—	1,500
25.875 — 1963	80,000	—	—	80,000
26.75 — 1963	33,500	—	—	33,500
	474,669	11,055	750	462,864

\*Not available for further options.

As a result of the expiry in 1964 of the second Share Option Plan no further shares are available for the granting of options.

There were 28,949,183 authorized common shares unissued at 31st December 1964, of which 1,500,000 are reserved for issuance under the conversion privileges of the preferred shares, 590,319 under the new Employee Share Purchase Plans and 462,864 under the Share Option Plans.

**9. Dividend Restrictions:**

Consolidated earned surplus at 31st December 1964 includes approximately \$147 million which, pursuant to the provisions of certain debt issues of Aluminum Company of Canada, Ltd., is not distributable in dividends either in cash or in kind to Aluminium Limited, the holder of its common shares.

**10. Other Income:**

	1964	1963
Gain from sale of fixed assets and investments . . . . .	\$ 1,972,084	\$ 904,607
Income from time deposits and short-term investments . . . . .	1,847,048	1,655,494
Other . . . . .	543,460	189,920
	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>
	\$ 4,362,592	\$ 2,750,021

**11. Other Expenses:**

	1964	1963
Supplemental Compensation Plan . . . . .	\$ 991,524	\$ —
Exchange loss on redemption of debt . . . . .	2,229,209	1,972,233
Financing expenses . . . . .	48,278	218,732
Other . . . . .	221,338	230,135
	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>
	\$ 3,490,349	\$ 2,421,100

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**12. Supplemental Compensation Plan:**

Under the Supplemental Compensation Plan for certain employees that was approved by the shareholders in 1963, there is to be credited annually to a reserve an amount equivalent to one-tenth of the excess, if any, of net income over a 6% return on capital investment, both as defined in the Plan. The purpose of the Plan is to provide an incentive and a reward to employees who contribute substantially to the success of the enterprise, through the quality of their performance or the character of their service, by affording them a means of participating in that success. A committee made up of certain directors not eligible for supplemental compensation is to determine the allotments to employees. Such allotments will generally be payable over a period of four years.

For the year 1964, the credit to the reserve has been determined by the Company's auditors, as required by the Plan, as follows:

Net income for the year before the credit to the reserve . . . . .	\$50,748,446
<b>Add:</b>	
Interest on debt not maturing within one year . . . . .	24,809,698
Dividends on preferred shares of consolidated subsidiaries and other minority interest . . . . .	5,218,099
<b>Plan net income</b> . . . . .	
	80,776,243
<b>Less:</b>	
6% return on capital investment (principally debt not maturing within one year, capital stock and surplus) . . . . .	70,861,007
Excess of plan net income over 6% return on capital investment . . . . .	\$ 9,915,236
Amount credited to reserve—10% . . . . .	\$ 991,524

**13. Commitments:**

A consolidated subsidiary company, Saguenay Shipping Limited, has charter hire commitments amounting to \$11.0 million in 1965 (\$20.1 million paid in 1964), \$9.0 million in 1966, \$7.2 million in 1967, \$6.2 million in 1968, \$5.0 million in 1969, \$3.9 million in 1970 and lesser amounts up to 1978. See also reference to capital expenditures in note 4.

**14. Statutory Information (parent and consolidated subsidiaries):**

Executive salaries for the year 1964 were \$4,513,660, legal fees \$447,045, directors' fees \$83,405, Canadian income taxes \$24,797,177.

**15. Geographical Distribution of Assets and Liabilities:**

A condensed analysis of the balance sheet at 31st December, 1964, according to the domicile of the constituent companies and their branches, follows:

	North America	South America & Caribbean	United Kingdom & Continental Europe	All other	Total
(in millions of dollars)					
<b>ASSETS</b>					
Current assets . . . . .	\$ 236	\$ 48	\$ 135	\$ 58	\$ 477
Investments . . . . .	9	—	27	9	45
Fixed assets . . . . .	1,235	249	126	105	1,715
Less: Depreciation, etc. . . . .	(573)	(110)	(49)	(32)	(764)
Other assets . . . . .	14	5	1	2	22
	<u>921</u>	<u>192</u>	<u>240</u>	<u>142</u>	<u>1,495</u>
<b>LIABILITIES</b>					
Current liabilities . . . . .	73	29	50	28	180
Funded debt . . . . .	456	11	34	25	526
Reserve for future income taxes . . . . .	120	6	6	3	135
Preferred shares, etc. . . . .	126	1	—	12	139
	<u>775</u>	<u>47</u>	<u>90</u>	<u>68</u>	<u>980</u>
Common shareholders' equity . . . . .	<u>\$ 146</u>	<u>\$ 145</u>	<u>\$ 150</u>	<u>\$ 74</u>	<u>\$ 515</u>

Main Countries of Operations	Company Name	Main Countries of Operations	Company Name
CANADA	Aluminum Company of Canada, Limited Aluminum Goods Limited Alcan Design Homes Limited Almetco Manufacturing Corp. Limited Newfoundland Fluorspar Limited Roberval and Saguenay Railway Company Saguenay Shipping Limited Saguenay Terminals Limited Alma & Jonquieres Railway Company Saguenay Power Company, Ltd. Saguenay Transmission Company, Limited Roslyn Metal Products Limited *Supreme Aluminum Industries Limited	IRELAND ITALY NETHERLANDS NORWAY SPAIN SWEDEN SWITZERLAND UNITED KINGDOM GHANA NIGERIA SOUTH AFRICA INDIA JAPAN MALAYSIA AUSTRALIA NEW ZEALAND INTERNATIONAL SALES	*Unidare Limited Alcan Alluminio Italiano S.p.A. *Angeletti & Ciucani Fonderia Laminatoio S.p.A. *Nederlandsche Aluminium Maatschappij *A/S Norsk Aluminium Company *A/S Nordisk Aluminiumindustri *Det Norske Nitridaktieselskap **"Alcan" Aluminio Iberico, S.A. *A/B Svenska Metallverken Aluminiumwerke A.-G. Rorschach *Boxal Fribourg S.A. Alcan Industries Limited *Alcan Enfield Alloys Limited Fisher's Foils Limited Ghana Aluminium Products Limited Alcan Aluminium of Nigeria Limited Flag Aluminium Products Limited Alcan Aluminium of South Africa Limited Indian Aluminium Company, Limited *Nippon Light Metal Company, Ltd. *Toyo Aluminium K.K. *Nikkei Aluminium Company, Ltd. Alcan Malayan Aluminium Company Limited Southeast Asia Bauxites Limited Johore Mining and Stevedoring Co. Ltd. *Semanat Bauxite Limited Australian Aluminium Company Limited *Queensland Alumina Limited Alcan Industries Limited, Branch *Aluminium Conductors Limited Alcan Africa Limited—Africa Alcan Asia Limited—Far East Alcan S.A.—Europe, Near East, North Africa Alcan (U.K.) Limited—U.K., Scandinavia Aluminium Limited Sales, Inc.—U.S.A., Caribbean and Latin America Magnesium Company of Canada, Ltd.
UNITED STATES	**Alcan Aluminum Corporation Metals Disintegrating Corporation Central Cable Corporation Alcan Argentina S.A.I.C. Aluminio do Brasil S.A. Aluminio Minas Gerais S.A. Aluminio Alcan de Colombia, S.A. Aluminio Industrial Mexicano, S.A. *Fluoresqueda, S.A. Aluminio del Uruguay S.A. Demerara Bauxite Company, Limited Sprostons, Limited		
ARGENTINA			
BRAZIL			
COLOMBIA			
MEXICO			
URUGUAY			
BRITISH GUIANA			
JAMAICA	Alcan Jamaica Limited Sprostons (Jamaica) Limited		
TRINIDAD	Chaguanas Terminals Limited Sprostons (Trinidad) Limited		
BELGIUM	Alcan Aluminium Raeren S.A.		
DENMARK	*Dansk Aluminium Industri A/S *Aluminord A/S		
FRANCE	Aluminium Alcan de France S.A. des Bauxites et Aluminés de Provence		
GERMANY	Alcan Aluminiumwerke G.m.b.H. *not consolidated **see note 1 to the financial statements		

## Transfer Agents

### PREFERRED SHARES

MONTREAL	National Trust Company, Limited
TORONTO	National Trust Company, Limited
VANCOUVER	National Trust Company, Limited

### COMMON SHARES

MONTREAL	National Trust Company, Limited
TORONTO	National Trust Company, Limited
VANCOUVER	National Trust Company, Limited
PITTSBURGH	Mellon National Bank and Trust Company
NEW YORK	First National City Bank
LONDON	Morgan Grenfell & Co. Limited

## Registrars

The Royal Trust Company
The Royal Trust Company
The Royal Trust Company

The Royal Trust Company
The Royal Trust Company
The Royal Trust Company
Pittsburgh National Bank
Manufacturers Hanover Trust Company
The Royal Trust Company

